



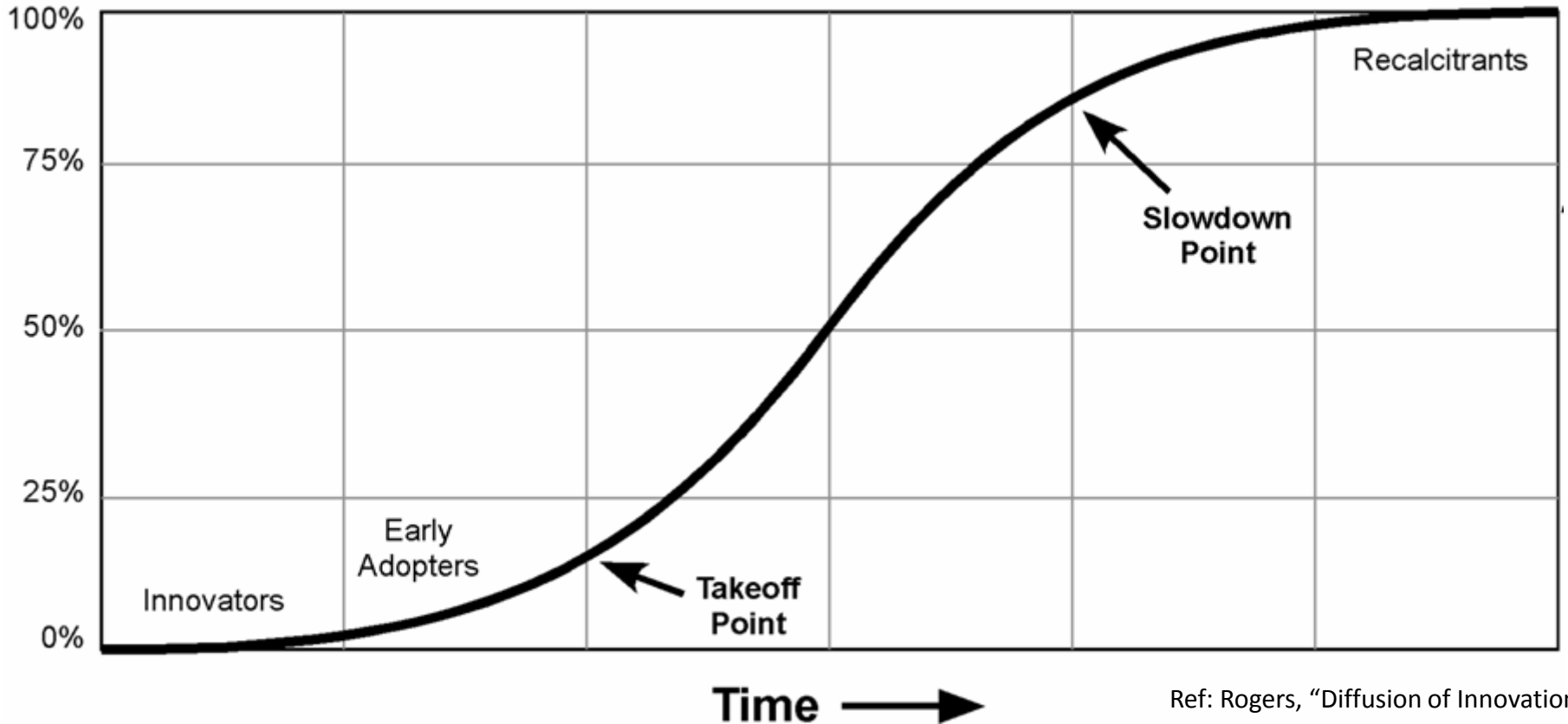
Victorian EV Trial Mid-term findings

“The Cars of Tomorrow” Melbourne, March 2013

Tom Garrish, Department of Transport

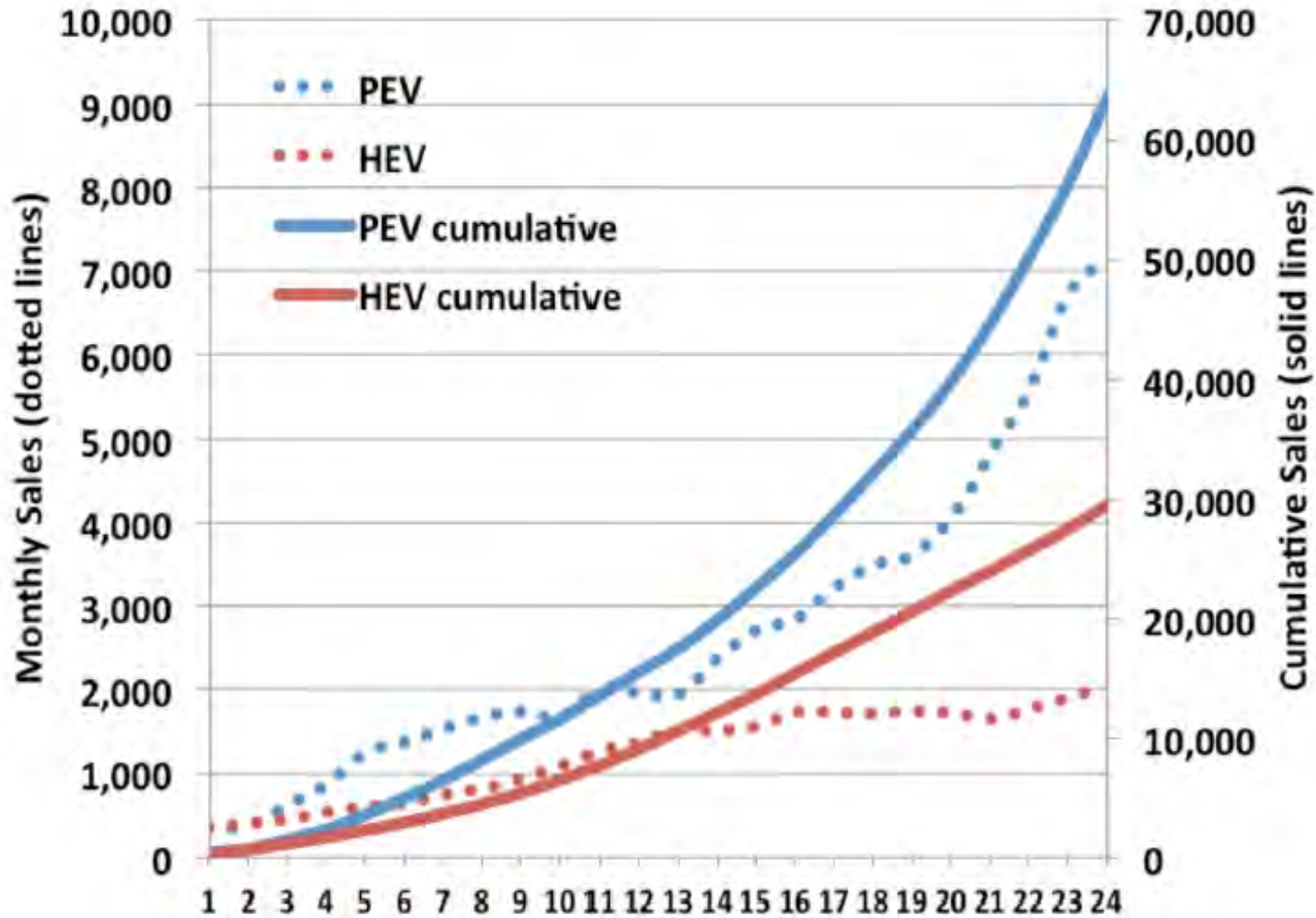
Technology adoption curve

Percentage of people who have adopted an innovation



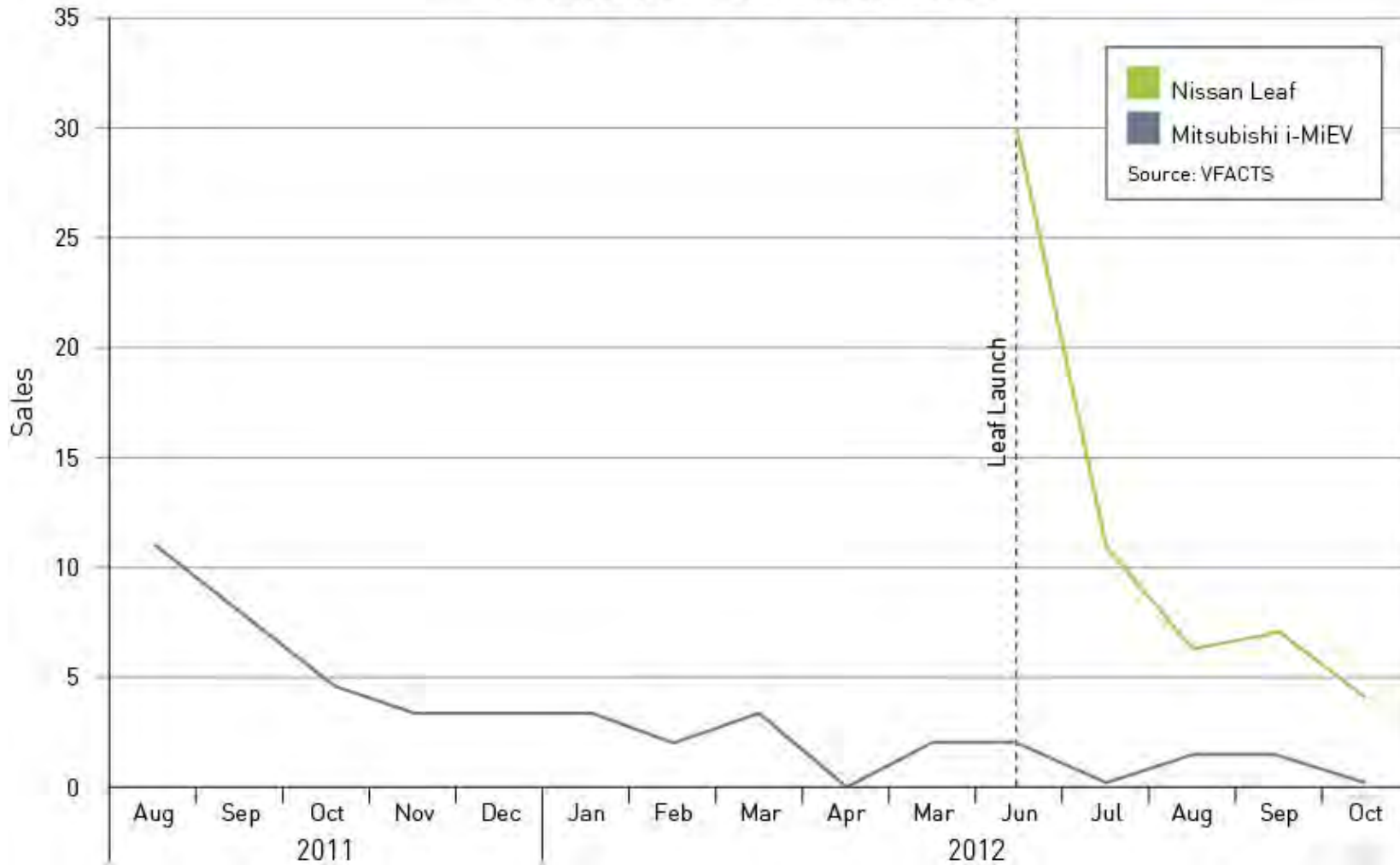
Ref: Rogers, "Diffusion of Innovations"

U.S. market growing

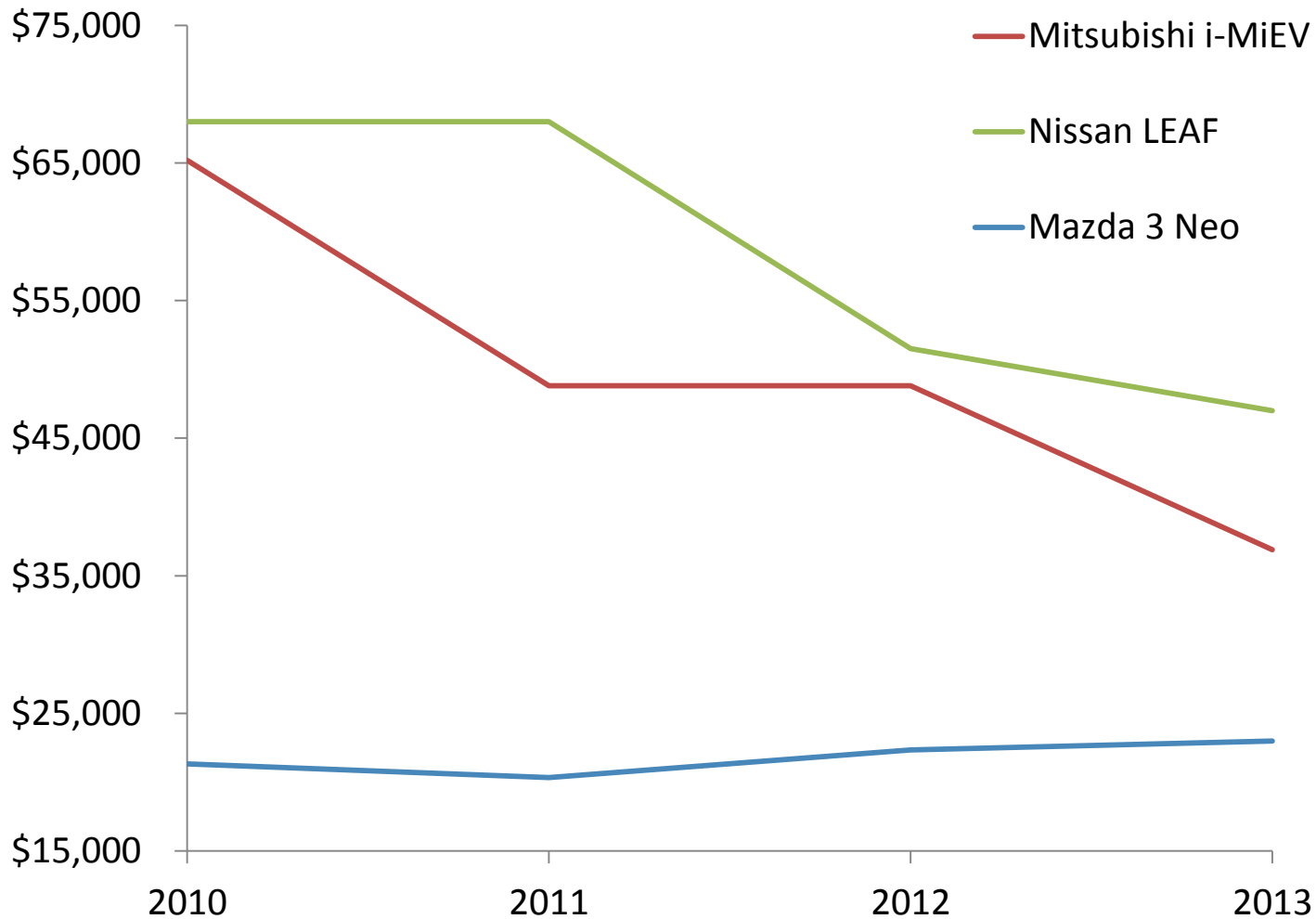


Australian market stagnating

Electric vehicle sales in Australia



Australian prices decreasing



The lessons of history



Mobile phones in Australia



1987	First cellular phone intro'd on analog (1G) network by Telecom
1993	<ul style="list-style-type: none">• GSM (2G) network intro'd• Cellular mobile market deregulated• Optus and Vodafone receive licences / launch networks
1994	One millionth subscriber joins network
1995-2000	Over 100 merger and acquisitions of mobile phone carriers
1999-2000	AAPT, Hutchison, One.Tel receive licences / launch networks
2001	<ul style="list-style-type: none">• One.Tel folds, AAPT cancels network plan• Broadband digital (3G) network licences auctioned
2003	First 3G networks launched by Hutchison, Telstra, Vodafone
2007	Mobile phone subscriptions outnumber Australian population
2009	Three-quarters of all 12-14 year olds have their own mobile phone

Early market turmoil



Hi Kristian,

Last week we wrote to you regarding some uncertainty for the future of Better Place in Australia, and we undertook to keep you informed with any updates.

We are now writing to advise you that our parent company has made the decision to limit any further investment in Australia.

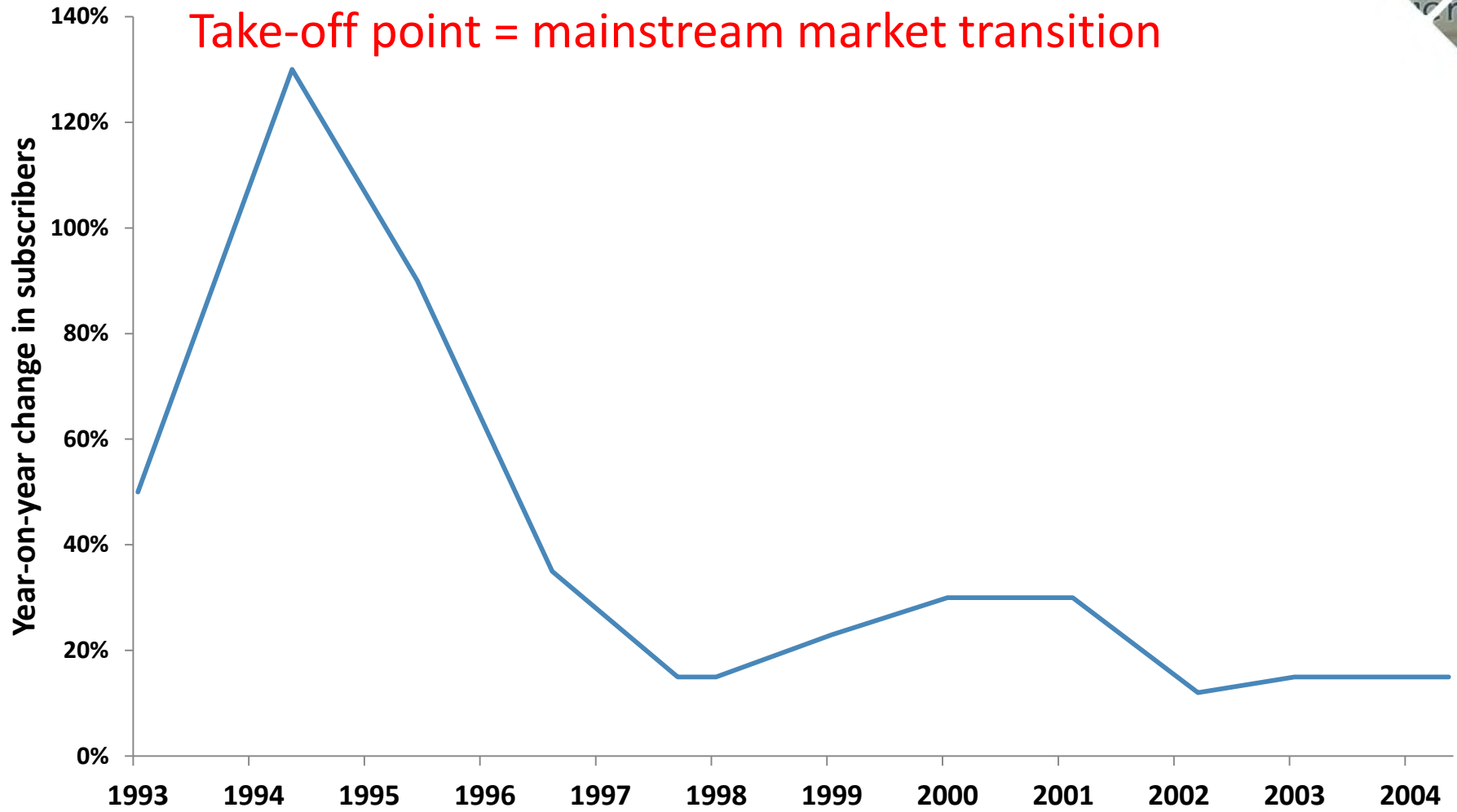
In these circumstances we anticipate that Better Place Australia will begin working towards an orderly wind-down of our operations here. Our priority will be to manage this process appropriately and fulfil our obligations to all our stakeholders. We will be in direct contact with many of you in the coming few days.

I thank you for all the support you have shown for Better Place here in Australia.

Kind regards,

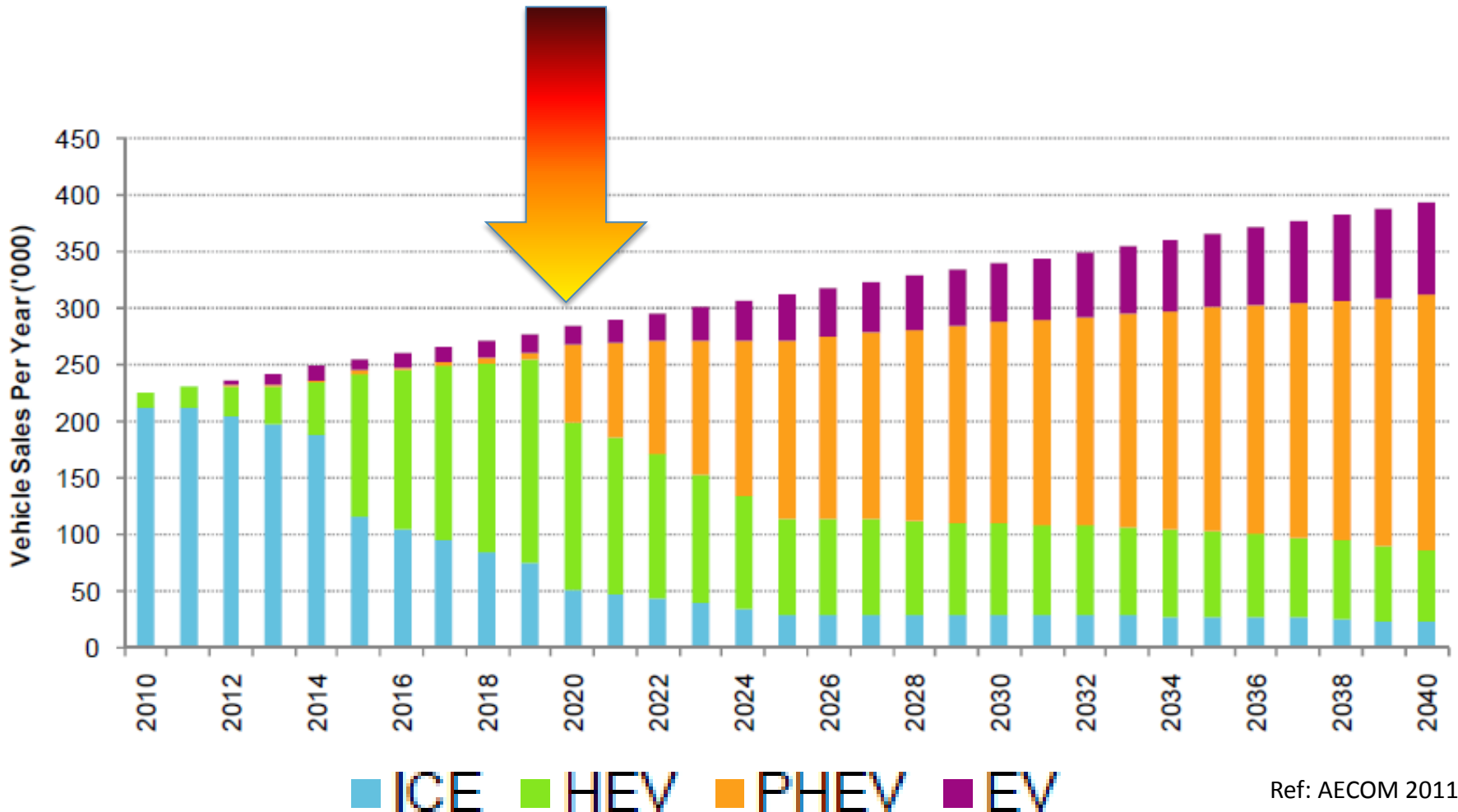
Antony Cohen
CEO, Better Place Australia

Mobile phone subscriptions



Australian EV market outlook

Take-off point = mainstream market transition



Key influences



CONSUMER PREFERENCES



Vic EV Trial – where to from here?

Position Victoria for the period from the end of the Trial up to the take-off point / mainstream adoption by:


1. Enhancing the **early-adopter EV value proposition**
2. Reducing the **costs of EV uptake** – now and in future
3. Raising **awareness, understanding and acceptance of EVs** in the Victorian community

Issue	Opportunities
<p>Early-adopter value proposition</p>	<ul style="list-style-type: none"> • Evidencing environmental bona fides • Linking EV uptake to renewable energy • Investigate High Occupancy Vehicle lane access • Local government and/or electricity market fleet focus • Building rating program recognition • Workplace charging program promotion • Sponsorship of on-street public charging locations • Signage for public charging locations • Reservation facility for commercial charging / parking locations • EV drivers forum • Fleet knowledge sharing • Corporate charging networks • Centralised charging network information • Information for developers, landlords, property managers etc
<p>Electric vehicle purchase prices</p>	<ul style="list-style-type: none"> • Reduced barriers to market entry • Increased market competition • Purchasing coalitions

Issue	Opportunities
Fleet EV uptake	<ul style="list-style-type: none"> • Purchasing coalitions (particularly E-LCVs) • Promotion to decision-makers • Improved charging activity data • Improved operational cost data for PHEVs • Knowledge sharing • Marketing-focused vehicle deployments (local government and electricity market fleets; corporate charging strategies)
	<ul style="list-style-type: none"> • 32 A charging vehicle capability • PHEVs • Quick charger network • Corporate charging strategies • Improved charging management capability
	<ul style="list-style-type: none"> • Designated EV champions • Strategic vehicle deployments • Corporate charging strategies
Depreciation / resale values	<ul style="list-style-type: none"> • OEM intervention • Battery standards • Second-life battery market

Issue	Opportunities
<p style="text-align: center;">Charging infrastructure roll-out</p>	<ul style="list-style-type: none"> • Improved charging network information • Optimised vehicle connectivity • Technical standards development / adoption
	<ul style="list-style-type: none"> • Agreed signage • Guidance for parking management / enforcement • Analysis of Victorian housing stock
	<ul style="list-style-type: none"> • Measures to address rentals, leased commercial premises, on-street locations holders • Identification of priority locations for public charging outlets
	<ul style="list-style-type: none"> • Facilitation of network roaming arrangements / agreements • Workplace charging program promotion • Sponsorship of on-street public charging locations • Promotion for public charging locations
	<ul style="list-style-type: none"> • Reservation facility for commercial charging / parking locations • Information for developers, builders, landlords, property managers, councils, electricity distributors etc • Identification of priority public charging locations
	<ul style="list-style-type: none"> • Building rating program recognition • Measures to address new developments, rentals, leased commercial premises • Support for priority public charging locations • Quick chargers

Issue	Opportunities
Electric vehicle range / charging time	<ul style="list-style-type: none"> • Workplace charging • Public charging network, including quick chargers • Improved charging network information • Optimised vehicle connectivity • Promote awareness of driving patterns/distances • Knowledge-sharing through EV drivers forum
Environmental impacts	<ul style="list-style-type: none"> • Linking EV uptake with renewable energy
Grid impacts	<ul style="list-style-type: none"> • Information for EV operators (households, fleets) on ‘smart’ charging strategies • Information for electricity distributors on grid impacts from EV charging, management options • Measures to promote EVs for energy storage (V2G)
Electric vehicle awareness, understanding and acceptance	<ul style="list-style-type: none"> • Information about E2Ws • Promotion of the performance characteristics of EVs • Targeting information at universities and their alumni • Specify EV operating cost advantages as weekly / monthly • Establish environmental bona fides • Investigate High Occupancy Vehicle lane access • Partnerships for on-street charging locations • Promotion of the public charging network

The image shows the cover of a report. The top half features a blurred background of green foliage. The bottom half shows a white electric car being charged at a station with a blue charging cable. The text on the cover is in a bold, sans-serif font.

**CREATING
A MARKET**
VICTORIAN ELECTRIC
VEHICLE TRIAL
MID-TERM REPORT

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